

**NAVAL REACTORS DOE DIRECTIVE IMPLEMENTATION BULLETIN  
430.1B-100, REVISION 1,**

Naval Reactors (NR) Implementation Bulletin (IB) 430.1-100, Revision 0, for DOE Order 430.1, LIFE-CYCLE ASSET MANAGEMENT is hereby cancelled. NR IB 430.1B-100 Revision 1 implements DOE Order 430.1B, Change 2, REAL PROPERTY ASSET MANAGEMENT (RPAM) dated April 25, 2011. DOE Order 430.1B contains an NR exclusion; however, the Director, Naval Nuclear Propulsion Program (NNPP) implements and oversees requirements and practices pertaining to the Order for activities under the Director's cognizance, as deemed appropriate.

Consistent with the Naval Nuclear Propulsion Program (NNPP) overall concept of operations, the following provides specific implementation guidance for Department of Energy (DOE) Order 430.1B, REAL PROPERTY ASSET MANAGEMENT (RPAM) (hereafter referred to as "the Order") for DOE assets under the NNPP Director's cognizance. This guidance takes precedence over DOE Order 430.1B RPAM requirements and guidance found in other related DOE documents.

For matters in which NR has prescribed or approved requirements for use in the NNPP, the NR requirements shall be used in lieu of guidance contained in DOE Order 430.1B or any referenced order or guide. Such matters include requirements pertaining to the design, development and servicing of prototype and shipboard naval nuclear propulsion plants and their support equipment and test facilities; radiological matters, including the control of radioactivity and radiation associated with the NR program; reactor and nuclear safety; and matters affecting the occupational safety and health of the workforce.

Although the Order has an NR exclusion, it is NNPP practice to apply the provisions of DOE orders to the extent they are appropriate and consistent with Program practices. Accordingly, Program elements shall implement the requirements of DOE Order 430.1B subject to the modifications provided below:

1. The duties and responsibilities delineated in the Order for various DOE headquarters components are carried out by NR in accordance with existing Program policies and practices. Involvement of other DOE headquarters offices such as the Office of Engineering and Construction Management (OECM), Lead Program Secretarial Office (LPSO) and the Cognizant Secretarial Office (CSO) shall be initiated by NR as appropriate.
2. Unless otherwise noted, the duties and responsibilities delineated in the Order for the Program Secretarial Office (PSO) will be performed by NR Laboratory Field Office (NRLFO) coordinating with NR Headquarters as required. Additionally, oversight and evaluation of RPAM matters under the Director's cognizance will be conducted by the NRLFO with additional oversight provided by NR Headquarters.

3. Requests for waivers and exceptions to specific requirements of this IB will be submitted to NR for review and approval.

4. **FIMS Reporting Requirements:** Executive Order (E.O.) 13327 established the Federal Real Property Council (FRPC) within the Office of Management and Budget (OMB) and requires each agency develop and track real property management plans. The FRPC provides guidance and tracks each agency's real property asset management plans. The Facilities Information Management System (FIMS) is DOE's real property asset management system. Data and performance measures from FIMS are reported to the FRPC. Annually, the Prime Contractor will review, analyze, and report the FRPC data and performance measures, as indicated in this IB, and submit to NR/NRLFO before the FIMS year-end snapshot. The date of this snapshot varies from year to year. NRLFO and the Prime Contractor will review these submission dates and agree when the Prime Contractor will submit the FRPC data and performance measures to NRLFO for review and approval.

The DOE FIMS system was established to meet the FRPC requirement to establish and maintain a single, comprehensive and descriptive database of all real property. NR populates the FIMS system for FRPC, External Budget, and the NR Sustainability Plan performance measures and reporting requirements. BMPC shall create a reference list of the current FIMS data fields and indicate the fields that BMPC populates for NR external reporting to Congress, DOE and the FRPC. The FRPC and DOE update reporting requirements annually; therefore, BMPC shall review FRPC and DOE reporting guidance and submit any reporting changes to NRLFO for approval before implementation. Additionally, the Prime Contractor shall ensure information documented in FIMS is aligned with sustainability, financial, budget, and facilities databases and reports. Any differences in reporting definitions shall be documented in the FIMS data field reference list. This review should be completed before July 31, annually.

5. **Section 4, Requirements:** The Order is divided into the following sections: planning, real estate, acquisition, maintenance and recapitalization, disposition and care-taking, value engineering (VE), and performance goals and measures.

Current NR Program practices considered equivalent will be utilized as highlighted below.

6. **Section 4.a, Planning:** NR implements the following order requirements as follows:

a. Section 4.a.(2) (and elsewhere) refers to a Ten-Year Site Plan (TYSP). NR has a Ten-Year Facility Plan (TYFP) which is the primary long-term planning document used by the Facilities community for integrated planning of facilities and infrastructure improvements, sustainment, and disposition of real property assets. The TYFP identifies

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key facility issues and provides holistic assessments for each site through a common work breakdown structure. These plans are integrated across the four NR Program DOE sites to provide an enterprise view for the ten-year planning horizon.

The TYFP shall be consistent with the requirements, planning assumptions, and goals in the following planning and budgeting documents:

- (1) NR Sustainability Plan,
- (2) Integrated Facility Infrastructure (IFI) Crosscut Budget as described below,
- (3) NR Technical Budget Plan (NRTBP) as described below,
- (4) and NR Decontamination and Demolition (D&D) plans.

(5) Although FIMS is not a planning or requirements document, the FIMS database does contain out-year projection data. At the time of the submittal of the TYFP, the FIMS database, and the TYFP shall be consistent or deviations must be identified and reconciled.

b. Section 4.a.(2).(a) and (3).(f) of the Order establishes requirements that the TYFP is consistent and support development of the IFI Crosscut Budget and that the TYFP support the Department's Strategic Plans including footprint reduction. The NR Program implements these requirements, and other requirements noted elsewhere in this report, using Special Schedule 25 (SS-25) of the NRTBP:

(1) Development of the IFI Crosscut Budget. NR uses the information in SS-25 to develop the IFI Crosscut, an externally required budget document. Externally required budget information often changes; therefore, annually NR will provide guidance to the Prime Contractor for submitting the information in SS-25 required for preparation of the IFI Crosscut Budget.

(2) Footprint reduction tracking. SS-25 shall include a footprint reduction table that separately identifies each construction project that adds square footage and the corresponding offsetting demolition projects. The demolition projects in this table must be fully-funded. The intent of this requirement is an accurate list of projects that contribute to the footprint reduction plan. Additionally, anticipated disposition, disposition method, and determination of an asset as excess are FIMS data fields supporting FRPC reporting requirements; therefore, SS-25 footprint reduction table shall be reconciled with FIMS.

The Prime Contractor shall submit SS-25 twice per year with the NRTBP.

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c. Section 4.a.(2).(b) (and elsewhere) refers to a DOE Planning, Programming, Budgeting, and Evaluation System (PPBES) and Section 4.a.(3).(d) (and elsewhere) refers to a field budget call. NR Headquarters is responsible for collecting and reporting information for the PPBES and field budget call.

d. Section 4.a.(3) shall be implemented as follows: The content on the TYFP must address how the site's real property assets will support the Program's mission. It must be a comprehensive NR Program DOE four site plan. The format of the TYFP should be consistent across all four sites; however, the TYFP can be rearranged to meet the unique requirements of each site. As a minimum, TYFP must include the following:

(1) The TYFP Work Breakdown Structure.

(2) Planning assumptions for the next 30 years.

(3) Plans to meet program missions, budgets, planning estimates, and performance outcomes, within the Program's fiscal projections.

(4) An assessment of the current status of all real property assets, including discussions of condition assessments, maintenance and recapitalization plans, space utilization, excess facilities disposition, caretaking, sustainability, and unique site issues.

(5) All real property asset projects and activities, both funded and unfunded, that are required to meet program missions shall be described in the TYFP. These projects include the following: new construction, consolidation of operations, elimination of excess property, maintenance, recapitalization, caretaking, and sustainability. A prioritized list of funded projects shall be maintained in the NRTBP, Enclosure-8.

(6) An implementation plan for complying with the NR footprint reduction strategy including the following requirements:

(a) The footprint reduction plan will apply to projects that are first funded in Fiscal Year 2010 or later.

(b) Square footage additions and offsets will be managed and reported at the combined four site level, such that increases at one site may be offset at another. This is appropriate since all four sites support a common mission.

(c) Demolition of offsets shall occur within five years of the beneficial occupancy of the new facility. Since there are few inactive facilities that could support relocations of existing operations, some of the offsetting demolition will likely have to occur after existing operations are moved to the newly constructed facility.

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(d) Planning, tracking, and budgeting of this requirement will be accomplished through the semi-annual issuance of the IFI Crosscut Budget data (as presented in Special Schedule 25) over a ten-year timeframe.

(e) Buildings or building additions that provide a new capability to the NNPP will be proposed to NR/NRLFO for exemption from the footprint reduction strategy no later than Critical Decision (CD)1.

(7) A description of caretaking efforts for each asset nearing disposition or long-term D&D efforts. This description shall include, at a minimum, the type of caretaking, implementation schedule, and associated costs.

(8) Planning and progress reports on past performance and projected future outcomes are not tracked within the TYFP; however, these reports are tracked and projected for external budget reporting in the IFI, FIMS year-end reports (i.e., FRPC data), and within the NRTBP. Refer to the above FIMS Reporting Requirements in Paragraph 4 of this IB for guidance on reporting FRPC performance measures. Additionally, NR conducts internal quarterly facilities management reports which include the BMPC Corporate Facilities Report, the Executive Summary Construction Report, the Facilities Operations and Maintenance (O&M) Functional Area Report, and the monthly NR Family of Reports.

e. Section 4.a.(4) The Prime Contractor shall submit the TYFP every two years to NR for approval.

**7. Section 4.b Real Estate:** NR implements the following modifications to the Real Estate section of the Order. When necessary, NRLFO shall coordinate external real estate assistance as required.

a. Section 4.b. (1) and (2) of the Order establishes guidance on real estate transactions. Given the Program's limited experience and infrequent participation in real estate transactions, NR considers that this guidance is better implemented by the Army Corps of Engineers or DOE Certified Realty Specialists in the rare cases when the NNPP does purchase, lease, or dispose of real property.

b. Section 4.b.(3) of the Order establishes guidance on land-use planning. NR establishes 30 year planning assumptions in the Ten-Year Facilities Plan.

c. Section 4.b.(4), (5), and (7) of the Order establishes methods to disposition under-utilized Federal real property assets. The DOE methods include transfer to another program, reuse outside of the program, demolition, disposal, or sale. Currently, the only disposition of real property assets used by NR is demolition. Therefore, the

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FIMS Reporting Field for disposition method should be reported as demolition unless an alternative is approved by NRLFO. NR reporting requirements for FIMS are located in Paragraph 4 of this IB. If NRLFO approves an alternative disposition method, NRLFO shall make external notifications via NR as required per the Order Section 4.b.(7).

d. Section 4.b.(6) of the Order establishes requirements for out-grant real estate actions. The NR Program does not currently lease real property falling within the scope of the Joint DOE/EPA "Interim Policy Statement on Leasing Under the Hall Amendment", dated June 30, 1998. Any future plans by NRLFO to lease real property falling within the scope of the Joint DOE/EPA Interim Policy Statement on Leasing Under the Hall Amendment, dated June 30, 1998, shall be performed in accordance with the guidance and direction therein and any then applicable DOE directives.

e. Section 4.b.(8)(a) of the Order establishes the requirement for the DOE real property asset inventory system. The DOE real property asset inventory system is FIMS and NR reporting requirements for FIMS are located in Paragraph 4 of this IB.

f. Section 4.b.(8)(b) of the Order establishes the requirement for real property asset inventory reports. BMPC shall conduct a "Ten-Year One-Hundred Percent Real Property Inventory" and reconcile the FIMS database with the Oracle financial database. Any changes required for either database shall be documented in a change control request submitted to NRLFO for approval.

**8. Section 4.c Acquisition:** Real property asset acquisition is accomplished in accordance with existing NR policies including NR IB 413.3-109, Revision 2, PROGRAM AND PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS and NAVAL REACTORS PROCUREMENT MEMORANDUM (NRPM) 43D, PRIME CONTRACTOR FUNDING AND LABORATORY TECHNICAL WORK PLAN CONTROLS.

**9. Section 4.d Maintenance and Recapitalization:** NR implements the requirements for maintenance of real property assets as follows:

a. Paragraph 4.d.(1) of the Order is met through existing NR Program requirements as discussed in the NR DOE O IB 433.1-126, MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES in lieu of the DOE STD-1073-93, GUIDE FOR OPERATIONAL CONFIGURATION MANAGEMENT PROGRAM and DOE O 433.1, MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES.

b. Paragraph 4.d.(1), of the Order requires each site to have a maintenance program that establishes a balanced approach to both sustain and recapitalize real property assets. The Prime Contractor shall maintain procedures to manage

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sustainment and recapitalization of non-nuclear maintenance and operations of the Program's real property assets. These procedures shall include corporate guidance on documenting real property asset inventory data and performance measures in FIMS. The Prime Contractor's procedures shall be consistent with FIMS user guides to the extent that the FIMS user guides support the reporting requirements documented in the FIMS annual reporting requirements list noted in Paragraph 4 of this IB. At a minimum, BMPC shall maintain and update procedures that ensure consistent, balanced, and accurate four-site reporting in FIMS of the following maintenance and operations management areas:

(1) Facilities Condition Assessments, including a four-site common definition of and reporting requirements for the Asset Condition Index (ACI),

(2) Deferred Maintenance (DM), including four-site common definitions and reporting requirements for optimal period to accomplish maintenance and deferred maintenance,

(3) Cost Accounting System for Actual Maintenance (AM) and Operating Costs, including four-site common definitions and reporting requirements for AM, Operating Costs, and the Maintenance Investment Index (MII) in both FIMS and the IFI Crosscut Budget,

(4) Budget, Prioritization, and Planning for Future Maintenance, including reporting requirements for FIMS and the IFI Crosscut Budget,

(5) Environmental Sustainability (e.g. metering, high performance sustainable buildings, and etc.),

(6) Replacement Plant Value (RPV),

These procedures shall be maintained in Chapter 11 of the Property Control Manual. Updates to the Property Control Manual shall be submitted to NRLFO for approval.

c. Paragraph 4.d.(2) through 4.d.(6) of the Order, Attachment 2, Paragraph 5.d and Attachment 5, Paragraph 2 (and elsewhere) establish requirements to perform condition assessments on all real property assets at least once during any five-year period. For NR sites, the Prime Contractor shall conduct condition assessment surveys for "mission critical," as defined in FIMS, facilities and site infrastructure every five years. The Prime Contractor shall conduct tailored condition assessments every five years for the remaining facilities and site infrastructure based on the mission need. The Prime Contractor shall develop and maintain procedures for a Facility Inspection Program (FIP) and Cognizant Engineer Inspections that include a review of the current condition of the real property assets, estimated time to failure, optimal period to accomplish

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maintenance, required maintenance and the estimated cost to correct identified deficiencies. The ACI and required maintenance established by the FIP or Cognizant Engineering Inspections should be documented in the Enterprise Facility Management (EFM) database and any DM should be reported in FIMS. Updates to the Facility Inspection Program shall be submitted to NRLFO for approval.

d. Paragraph 4.d.(7) of the Order requires that each site develop a recapitalization plan. This requirement is met by the TYFP and NRTBP.

e. Paragraph 4.d.(8) of the Order establishes a requirement to identify all mission essential assets. For NR sites, the Prime Contractor shall identify assets as either "mission critical," "mission dependent, not critical," or "not mission dependent" as defined in the FIMS Users Guide. The Prime Contractor shall ensure consistent four-site reporting of the mission categorization in FIMS. The Prime Contractor shall ensure the maintenance and facility condition inspections are prioritized based on the mission categorization above unless an emergent need is identified.

**10. Disposition and Care-Taking:** Disposition and care-taking of assets shall be met through implementation of the "Four-Site Principles for Placing Structures Into Caretaking Status" and the "30-Year D&D Plan" as approved by NR.

**11. Value Engineering:** Paragraph 4.f through 4.f.(2) of the Order and Attachment 2, Paragraph 7 requirements for Value Engineering shall be met through implementation of normal Program maintenance and procurement practices found in the NR IB 413.3-109.

**12. Performance Goals and Measures:** Paragraph 4.g of the Order establishes performance goals and measures that link performance of program goals and budgets to outputs and outcomes. The Order requires three levels of performance measures, site-wide, program-wide, and department-wide. The site-specific measures must be developed by each site/field manager to assess the level to which the Program's established outputs and outcomes have been attained. The Program must establish annual performance targets for their real property assets and state their expected performance outputs and outcomes in their annual direction and guidance. Additionally, DOE establishes corporate measures for real property asset management that are reported to the FRPC. For NR sites, the Prime Contractor shall develop the following performance measures and metrics and report as stated below:

a. Each site shall maintain annual performance targets for their real property assets and state their expected performance outputs and outcomes in their Annual Facility Plan. The site-wide performance measures shall be submitted to NRLFO for approval. Tracking and metrics to attain established goals shall be reported in Quarterly Construction and Maintenance and Operation reports. A comparison of prior-year

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annual performance to established performance measures shall be documented in the site's Annual Facility Plan.

b. The NR Program performance measure for real property asset management is the Maintenance Investment Index (MII).

1. The Actual MII is the actual dollar amount spent to accomplish real property maintenance and repair [Actual Maintenance (AM)] divided by the RPV of the owned active assets taken from the data in the FIMS year-end snapshot.

2. The Requested MII is the dollar amount requested to be costed in the Budget Year to accomplish real property maintenance and repair divided by the RPV of the owned active assets from the data in the FIMS year-end snapshot.

The DOE-wide goal is a MII rate of between 2% to 4% of the RPV of owned active assets taken from the data in the FIMS year-end snapshot. However, for the NR Program, the Prime Contractor shall ensure adequate funds are budgeted and spent for facility maintenance and repair based on a consistent tailored approach for establishing the NR approved annual Requested MII rate. The Prime Contractor shall report the Actual and Requested MII two times per year in the NRTBP, SS-25. The requirements of Paragraph 4.g of the Order shall be implemented as stated in Paragraphs 4 and 6.b of this IB.

c. DOE corporate performance measures for real property asset management are the following:

1. Asset Utilization Index (AUI) is a ratio of the area of operating facilities to the area of all operational and excess facilities. This index is derived from data in FIMS obtained from annual utilization surveys.

2. Asset Condition Index (ACI) is DOE's corporate measure of the condition of its facility assets. ACI is one minus a ratio of deferred maintenance to Replacement Plant Value. This index is derived from data in FIMS obtained from condition assessments of the site.

Paragraph 4.g (3) of the Order states that these performance measures are reported to DOE quarterly via the data contained in the IFI Crosscut Budget. For NR sites, the Prime Contractor shall report the data required for the IFI Crosscut Budget twice per year in the NRTBP SS-25. Additionally, the information in the IFI Crosscut Budget shall be reconciled against the data contained in the FIMS year-end snapshot. The requirements of Paragraph 4.g of the Order shall be implemented as stated in Paragraphs 4 and 6.b of this IB.

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**13. Responsibilities:** The duties and responsibilities delineated in the Order for various DOE headquarters components are carried out by NR\NRLFO in accordance with existing Program policies and practices. NRLFO is responsible for oversight and implementation of the Order and will coordinate with NR Headquarters for matters requiring NR action. Involvement of other DOE headquarters offices such as the Office of Engineering and Construction Management (OECM) shall be initiated by NR as appropriate.

a. The Prime Contractor shall review any DOE RPAM Guidance, and any recommended changes to reporting requirements will be submitted to NRLFO for approval. The Prime Contractor is responsible for implementing the guidance approved by NRLFO.

b. Paragraphs 5.f and 5.f.(1) through 5.f.(4), and 5.g through 5.g.(2)(b), and 5.i through 5.i(3) of the Order refer to Multi-program sites, which are not applicable to the NR Program.

c. Paragraph 5.h., 5.h.(1) through 5.h.(6) and Paragraphs 5.h.(8) through 5.h.(9)(e) of the Order establishes requirements for the Site/Field Manager. For NR sites, the Prime Contractor is responsible for proper stewardship of the site's real property, ensuring a qualified facilities management staff is in place. The Prime Contractor is also responsible for ensuring consistent, accurate reporting in FIMS, the TYFP, the Consolidated Energy Data Report (CEDR) Database, and the IFI Crosscut Budget to support strategic planning and long term mission readiness. For NR sites, the Prime Contractor, Materials and Information Management Department shall be responsible for maintaining the information in the FIMS database including configuration control, year-end validation, and reconciliation with other databases and reports including the Oracle financial database, the TYFP, the CEDR, the Environmental Liability Report and the IFI Crosscut Budget. The Facilities Department shall provide data and support reviews of the information in FIMS.

**14. The Contractor Requirements Document (CRD)** (Attachment 2 to the order) should not be included in the Prime Contract. This IB shall be considered the CRD.

The Prime Contractor shall assign a process owner responsible for implementation of the requirements of the Order as implemented by this IB. The RPAM lead will be the main Prime Contractor point of contact for NRLFO.

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